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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,789	10/05/2004	Kun-Yi Chan	MTKP0178USA	5788

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EXAMINER	
WYATT, KEVIN S	

ART UNIT	PAPER NUMBER
2878	

NOTIFICATION DATE	DELIVERY MODE
10/03/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/711,789	CHAN ET AL.	
	Examiner	Art Unit	
	Kevin Wyatt	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-70* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *27-48* is/are allowed.

6)☒ Claim(s) *49 and 60* is/are rejected.

7)☒ Claim(s) *50-59 and 61-70* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is in response to the Request for Continued Examination filed 08/29/2007. Claims 27-70 are currently pending.

Claim Objections

2. Claims 54 and 61 are objected to because of the following informalities:

In claim 54, line 4, remove "of" before "times" and place before "that".

In claim 61, line 2, replace "till" with --until--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 49, and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Udagawa (U.S. Patent No. 5,563,862).

Regarding claim 49, Udagawa shows in Fig. 4, a light emitting device calibration system for calibration a light emitting device in an optical disc drive, the light emitting device calibration system comprising: a laser diode (1) installed within the optical disc drive being the light emitting device to be calibrated; a microprocessor (24, i.e., cpu) electrically coupled to the light emitting device for controlling power of the light emitting device by changing values of a drive signal (col. 9, lines 28-35), receiving a power

indication signal corresponding to light emitted by the light emitting device, and determining a power relationship relating values of the drive signal to powers of the light emitting device according to the power indication signal for each of the values of the drive signal during a calibration mode (col. 7, lines 6-7, col. 8, lines 54-63); a light detector (laser monitor (5) or photodetector (9)) for detecting the light emitted by the light emitting device to generate an analog signal (col. 4, lines 14-29 or 36-38); a signal calibration circuit (combination of cpu (24) and APC circuit (31)) having a predetermined reference voltage (target value) for generating the power indication (col. 8, lines 54-63); and a non-volatile memory (47) for storing the power relationship determined by the microprocessor (24) during the calibration mode, wherein the microprocessor (24) uses said power relationship to control values of the drive signal according to desired powers of the light emitting device during a normal operation (col. 8, lines 54-63).

Regarding claim 60, Udagawa shows in Fig. 4, a method of calibrating a light emitting device in an optical disc drive, the method comprising: providing a laser diode (1) installed within the optical disc drive being the light emitting device to be calibrated; controlling power (via cpu (24) and apc circuit (31)) of the light emitting device by changing values of a drive signal to the light emitting device during a calibration mode (col. 9, lines 28-35); receiving a power indication signal corresponding to light emitted by the light emitting device (col. 7, lines 6-7, col. 8, lines 54-63); determining a power relationship relating values of the drive signal to powers of the light emitting device according to the power indication signal for each of the values of the drive signal (col. 7, lines 6-7, col. 8, lines 54-63); detecting the light (via laser monitor (5)) emitted by the

light emitting device to generate an analog signal (col. 4, lines 14-29); providing a predetermined reference voltage (target value); generating the power indication signal (from laser monitor (5)) according to the analog signal and the predetermined reference voltage (target value, col. 8, lines 54-63); and storing the power relationship determined during the calibration mode for controlling values of the drive signal according to desired powers of the light emitting device in a normal operation mode (col. 8, lines 60-63).

Allowable Subject Matter

5. Claims 27-48 are allowed.

6. Claims 50-59 and 61-70 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 27, the prior art fails to disclose or make obvious a light emitting device calibration system comprising, in addition to the other recited features of the claim, "a signal calibration circuit having a predetermined reference voltage being coupled between the light detector and the microprocessor for generating the power indication signal having an inverse relationship with the analog signal."

Regarding claim 38, the prior art fails to disclose or make obvious, a method of calibrating a light emitting device comprising, in addition to the other recited features of the claim, "generating the power indication signal having an inverse relationship with the

analog signal such that when the analog signal is at the state of no light was emitted by the light emitting device, the power indication signal reaches at a predetermined maximum value, which is a function of the predetermined reference voltage."

Claim 50 has allowable subject matter because the prior art fails to disclose or make obvious, either singly or in combination, a light emitting device calibration system for calibration a light emitting device in an optical disc drive, the light emitting device calibration system, comprising, in addition to the other recited features of the claim, "wherein during the calibration mode, the microprocessor adjusts a value of the drive signal so that the light emitting device does not emit any light, calculates a gain of the light emitting device calibration system by measuring a sampled maximum value of the power indication signal as detected by the microprocessor corresponding to the predetermined maximum value of the power indication signal, and correct the power indication signals as measured by the microprocessor for each of the plurality of values of the drive signal according to the obtained gain."

Claim 61 has allowable subject matter because the prior art fails to disclose or make obvious, either singly or in combination, a method of calibrating a light emitting device in an optical disc drive, comprising, in addition to the other recited features of the claim, "adjusting a value of the drive signal until the light emitting device does not emit any light; calculating a gain of the light emitting device calibration system by measuring a sampled maximum value of the power indication signal as detected corresponding to the predetermined maximum value of the power indication signal; and utilizing the gain to correct the power indication signals for each of the value of the drive signal."

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Naoi (Publication No. U.S. 2003/0072235 A1) discloses a method of controlling laser power and optical disk player.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Wyatt whose telephone number is (571)-272-5974. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571)-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K.W.

Georgia Epps
Supervisory Patent Examiner
Technology Center 2800